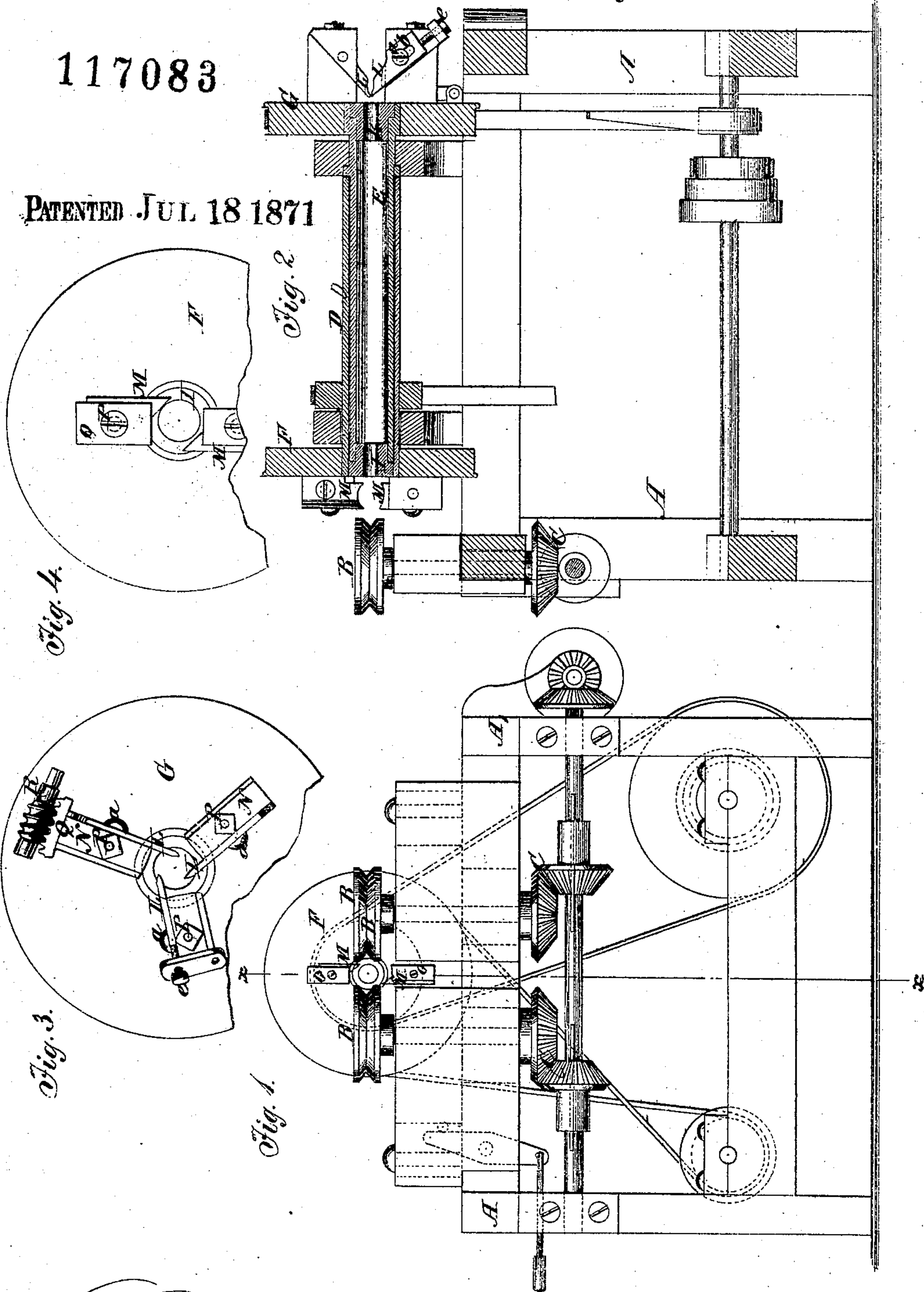


I.L. Lamb. Moulding Mach.

117083

PATENTED JUL 18 1871



Witnesses:

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UNITED STATES PATENT OFFICE.

ISRAEL L. LAMB, OF DARIEN, WISCONSIN.

IMPROVEMENT IN MOLDING-MACHINES.

Specification forming part of Letters Patent No. 117,083, dated July 18, 1871.

To all whom it may concern:

Be it known that I, ISRAEL L. LAMB, of Darien, in the county of Walworth and State of Wisconsin, have invented a new and Improved Machine for Making Moldings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in machines for making spiral or rope-moldings on rods or bars of wood; and it consists in a novel construction of the hollow mandrel in two parts, with a knife-carrying head on each, and with detachable rings or dies, one in each end, to serve for bearings for the rods and to be changed to use different sizes for the different sizes of rods to be turned. The invention also comprises an improved arrangement of the knife-stocks and adjusting apparatus therefor for adjusting the knives; also, an arrangement of the said stocks for holding the rings in place.

Figure 1 is an end elevation of my improved machine. Fig. 2 is a longitudinal section of the same taken on the line *xx* of Fig. 1, and Figs. 3 and 4 are face views of the knife-carrying heads.

Similar letters of reference indicate corresponding parts.

The frame A, feeding-rollers B, the driving-gear C for the latter, and also the driving-gear for the mandrel, are all similar to the devices used in other machines for the purpose. I propose to make the hollow mandrel of two parts or sleeves, D E, one fitting in the other, and each projecting beyond the bearing, on opposite sides of the frame, for the reception of a cutter-carrying head or disk, F G, for mounting the knife-carriers, so that they will always bear the same relation to the axis of the hollow mandrel, no matter how much the latter may wear or shift in its bearings; and I provide the detachable rings or dies I K, one in the outer end of each sleeve or section of the mandrel, to serve as bearings for the rod being fed through and acted upon. The knives or cutters L M, which are of the common

sort, are attached to the sides of the stocks or carriers N O, as shown, and these stocks are attached to the faces of the heads or disks by the pivot-bolts P, on which they may be turned to a considerable extent either way from their radial lines, in order to adjust them all accurately alike and to large or small rods; and for adjusting them I provide the outer ends of the stocks with the segmental working-gears Q, and provide each with a worm, R, mounted in suitable bearings on the face of the disk, and having a square shank for the application of a wrench for turning it. The knives may be attached by bolts *a* passing through slots *b*, and have adjusting-screws *c* for adjusting them endwise. By this arrangement I am enabled to adjust all the knives with the greatest accuracy; and, by the use of the knife-stocks N O, I am enabled to support the knives firmly down close to the cutting-edges, and thereby I prevent any clattering, which is common with knives of these machines and very injurious to the work. These knife-stocks are also intended to bear against the ends of the dies or rings I K and hold them in place. They may be turned on the pivots P sufficiently to admit of removing the said dies.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The hollow mandrel, consisting of the two parts D E, arranged as described, and provided with the detachable rings or dies I K and the knife-carrying disks F G, all substantially as specified.

2. The knives mounted on the stocks pivoted to the disks, as described, and provided with the adjusting-gears Q R, substantially as specified.

3. The arrangement of the knife-stocks N and O with the dies or rings for holding them in place, all substantially as specified.

4. The hollow mandrels D and E, having a set of molding-knives or cutters mounted on their disks or heads, substantially as specified.

ISRAEL L. LAMB.

Witnesses:

J. P. JOHNSON,
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